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Data 400 Mini Project – Idea 1

Research Question: *What is the relationship between legalized mobile sports betting and alcohol-related car crashes?*

Motivation: I am interested in the behavioral impact of legalized mobile sports betting. My initial idea was to investigate the impact legalization has had on liquor sales. However, I struggled to find data sources for liquor sales, making this a much more difficult topic. I decided that using alcohol-related crashes would be a great proxy for alcohol consumption and would add an additional aspect of risky and dangerous activity. I have had experience working with traffic and crash data and have even used TxDOT CRIS before.

Methodology: Investigate the causal relationship using a DiD model. PA would be the treatment group (legalized mobile sports betting in May 2019) and Texas would be the control (does not have legalized mobile sports betting). I would get monthly crash counts and use population estimates for both states to create a rate statistic for alcohol-related crashes. Controls would have to be incorporated as driving behavior in PA and TX are generally very different whether that be due to cultural, roadway, or law enforcement reasons. The time range would be 2016-2023.

Proposed Data Sources: Both PennDOT ([link](#)) and TxDOT ([link](#)) have free and publicly downloadable crash data. They both have query tools that can be used to get monthly crash counts, with a filter to only include crashes that are related to alcohol consumption.

Stakeholders: State policymakers who are considering legalizing mobile sports betting, public health officials, and sports betting companies.